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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,496	11/15/2001	Kjell Noren	P01,0374	2176
26574	7590	11/10/2004	EXAMINER	
SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473			JASTRZAB, JEFFREY R	
			ART UNIT	PAPER NUMBER
			3762	

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

ds

**Office Action Summary****Application No.**

10/002,496

**Applicant(s)**

NOREN ET AL.

**Examiner**

Joseph S. Machuga

**Art Unit**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Arguments***

Applicant's arguments have been carefully considered but are not deemed persuasive. The EP #0347708 patent notes (column 6, lines 6-29) that in order to determine the mean diastolic pressure the raw data from the sensor is fed through a low pass filter. This filter given it's inherent function would clearly mark the beginning and the end of the diastolic period. A timing circuit would be necessary to compute this value.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP document #0347708.
2. The EP document discloses an implantable medical device. The reference notes in column 3 lines 45+ that monitoring the hearts end diastolic pressure provides a clear indicator of the patient's condition and also indicates that monitoring the systolic pressure provides little information. The reference achieves the objectives through a pressure sensor 26 located in the right ventricle. The raw pressure data is passed through a low pass filter. While not explicitly stated it is considered obvious that the

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device has a signal processor and timing circuit that identifies the start and end of the diastolic phase since the circuitry is designed to locate the peak **diastolic** pressure as opposed to just the peak pressure. Also, the low pass filter through which the raw data is passed would mark the beginning and end of the diastolic phase.

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP #0347708 as applied to claim 1 above, and further in view of Kieval et al #5626623.

4. Kieval et al disclose an implantable medical device. The implant includes a differentiator and comparator to determine threshold values (note figure 1 where two EPAD threshold values are shown.) This EPAD value corresponds to the end of the diastolic period.

5. Given this teaching it would have been obvious to one of ordinary skill in the art to add a differentiator and comparator to the timing circuit in the EP document to accurately locate the end of the diastolic period.

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over EP#0347708 as applied to claim 1 above, and further in view of Noren #5871509.

7. Noren teaches the use of a medium pass filter to eliminate externally originating electromagnetic interference from a medical implant. To add such a filter as taught by

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Noren to the device in the EP document to eliminate interference from external electromagnetic sources would have been obvious to one of ordinary skill in the art.

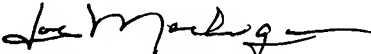
8. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP0347708 as applied to claim 1 above, and further in view of Carney #5368040.

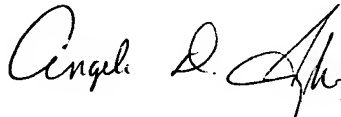
9. Carney discloses an implantable medical device. The implant includes a differentiator and comparator to determine threshold values by calculating the first and second derivatives of the pressure reading. This method gives clear indications of the markers. To use this method in the device disclosed in the EP document would have been obvious to one of ordinary skill in the art given Carneys teaching that it gives clear and accurate markers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Machuga whose telephone number is 703-305-6184. The examiner can normally be reached on Monday-Friday; 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela D Sykes can be reached on 703-308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joseph S. Machuga  
Examiner  
Art Unit 3762



**ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
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